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| APPLICATION NO.                                     | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|-----------------------------------------------------|-------------|----------------------|------------------------|------------------|
| 10/811,417                                          | 03/26/2004  | Michael R. Schramm   | 11721-043              | 2648             |
| 40879                                               | 7590        | 02/24/2006           | EXAMINER               |                  |
| AUTOLIV ASP<br>3350 AIRPORT ROAD<br>OGDEN, UT 84405 |             |                      | BLANKENSHIP, GREGORY A |                  |
|                                                     |             |                      | ART UNIT               | PAPER NUMBER     |

3612

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/811,417 | <b>Applicant(s)</b><br>SCHRAMM ET AL. |  |
|                              | <b>Examiner</b><br>Greg Blankenship  | <b>Art Unit</b><br>3612               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-9,11,16-20 and 22-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-9,11 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 19,20,22-30 and 33-35 is/are rejected.
- 7) ☒ Claim(s) 31 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/26/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19, 20, 23-26, and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Eipper et al. (6,224,120).

Eipper et al. disclose an apparatus with a grill (12) affixed to a front end of a vehicle (23).

Actuators (51-54) are coupled to the grill (12) and move the grill (12) between an extended position and a retracted position. When impacting an object with the grill in the extended

position, the grill is retracted against the actuators by deforming elements (42) such that

energy is absorbed. A speed dependent control unit is disclosed to operate the actuation of

the grill on lines 34-43 of column 3. In reference to claims 19 and 20, Figure 6 shows the

grill (12) above the bumper in both an extended position in front of the bumper and a

retracted position rearward of the bumper. In reference to claim 23, elements (42)

mechanically fail when they are deformed when the grill is subjected to a load. In reference

to claim 24, there is more than one actuator (51-54). In reference to claim 25, Figures 1, 2

and 5 show the grill with apertures for the headlights (19). In reference to claim 26, Figures

1, 2, and 5 show the grill's outer perimeter substantially encompassing the frontal surface of

the front end of the vehicle. In reference to claim 33, an impact sensor (56) is connected to

the grill (12). In reference to claim 34, the apparatus is capable of absorbing energy in when

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a load in many situations, including those of claim 34. In reference to claim 35, the control unit can operate the apparatus automatically without the intervention of an occupant.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. (6,224,120) in view of Wang (5,967,573).

Eipper et al. discloses that the pneumatic cylinder actuators (51-54) may be replaced by mechanical operators on lines of 23-25 of column 6, but does not disclose the claimed rack and pinion drive system.

Wang teaches the use of a rack (80) and pinion (82) drive system for a movable energy absorber at the front of a vehicle.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the pneumatic cylinder actuators of Eipper et al. with a rack and pinion drive system, as taught by Wang, to provide an effective actuator that requires less space and may increase safety by eliminating the need for the gas storage device that is required for operating the pneumatic cylinders.

5. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. (6,224,120) in view of Wang (5,967,573).

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Eipper et al. does not disclose the control unit extending the grill when the speed of the vehicle is greater than a threshold of between 10-35 mph.

Wang teaches a control unit programmed to extend a forward mounted energy absorber once the vehicle's speed has eclipsed a threshold of 15 mph (lines 38-47 of column 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to program the control unit of Eipper et al. such that it extends the grill of Eipper et al. once the vehicle's speed has eclipsed a threshold of 15 mph, as taught by Wang, to provide increased energy absorption characteristics when the likeliness of a high speed impact is elevated.

6. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. (6,224,120) in view of Wang (5,967,573).

Eipper et al. does not disclose the control unit retracting the grill when the speed of the vehicle is less than a threshold of about 8 mph.

Wang teaches a control unit programmed to retract a forward mounted energy absorber once the vehicle's speed is less than a predetermined threshold of 10 mph, which is about 8 mph (lines 54-67 of column 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to program the control unit of Eipper et al. such that it retracts the grill of Eipper et al. once the vehicle's speed is less than a threshold of about 8 mph, as taught by Wang, to make parking the vehicle easier by reducing the space occupied by the vehicle.

***Allowable Subject Matter***

7. Claims 1, 2, 5-9, 11, and 16-18 are allowed.

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8. Claims 31 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

1. Applicant's arguments filed 12/6/2005 have been fully considered but they are not persuasive.

The applicant has argued that 35 USC 102 rejections based on Eipper et al. do not anticipate the claimed invention because the applicant's invention is intended for reducing injury to pedestrians. While the structure of Eipper et al. is not disclosed for the specific intended use of absorbing impact energy between a vehicle and a pedestrian, the structure still anticipates the claimed invention. Eipper et al.'s structure has all of the claimed parts and functions in a similar manner. When an object impacts the extended grill, the grill is stroked towards the vehicle and deforms crash boxes (42). The deformation of the crash boxes (42) absorbs some of the energy. Also, the intended use of the invention is given little patentable weight since the structure of Eipper et al. can be used in a similar manner.

The applicant has argued that Eipper et al. teaches away from the present invention. While the disclosure of Eipper et al. does state that the pulled-back position of the frame reduces risk of injury to pedestrians, it does not state or imply that the grill structure will not absorb energy when a pedestrian is hit with the grill in the extended position. The ability of the structure of Eipper et al. to provide energy absorption during impact between a pedestrian and the vehicle is an inherent feature of the structure.

*Conclusion*

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

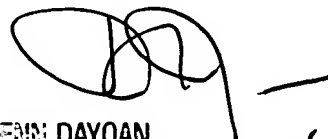
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Blankenship whose telephone number is 571-272-6656.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 571-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gab  
February 21, 2006

  
G GLENN DAYOAN  
PATENT EXAMINER  
CENTER 3600  
2/21/06